

Remarks:

Claims 1-21 remain for consideration in this application, with claims 1, 7, 12 and 17 being independent. In the Office Action, claim 1 was objected to as lacking appropriate formalities because “at” is missing before “least.” Furthermore, claims 12-21 were rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Finally, claims 1-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Jensen, U.S. Patent No. 6,065,000.

Claims 1 and 7 have been amended to change the language “of least one” to “of at least one,” thus conforming to the formalities cited in the Office Action.

Regarding the rejections based on 35 U.S.C. § 101, claims 12 and 17 have been amended to include a computer processor performing at least one of the core steps of the invention, as suggested by the Examiner.

Turning now to the rejections based on 35 U.S.C. § 103, Applicant respectfully asserts that a *prima facie* case of obviousness has not been established in the Office Action.

Obviousness, it will be appreciated, can be a problematic basis for rejection because the Examiner, in deciding that a feature is obvious, has benefit of the Applicant’s disclosure as a blueprint and guide, whereas one with ordinary skill in the art would have no such guide, in which light even an exceedingly complex solution may seem easy or obvious. Furthermore, once an obviousness rejection has been made, the Applicant is in the exceedingly difficult position of having to prove a negative proposition (i.e., non-obviousness) in order to overcome the rejection. For these reasons, MPEP § 2142 places upon the Examiner the initial burden of establishing a *prima facie* case which requires,

among other things, that there be identified some motivation or suggestion in the prior art or in the knowledge of one with ordinary skill to modify the reference or to combine reference teachings. If the Examiner fails to establish the requisite *prima facie* case, the rejection is improper and will be overturned. *In re Rijckaert*, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). Only if the Examiner's burden is met does the burden shift to the applicant to provide evidence to refute the rejection.

The Examiner must satisfy three criteria in order to establish the requisite *prima facie* case of obviousness: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine their teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or combination of references) must teach or suggest all the claim limitations. MPEP §706.02(j), citing *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). Furthermore, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992); see also *In re Gordon*, 221 USPQ2d 1125, 1127 (Fed. Cir. 1984). Additionally, "if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." MPEP §2143.01.

In meeting this initial burden, the Examiner "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention" *In re Fine*, 5 USPQ 2d 1596,1600 (Fed. Cir. 1988). The teaching or suggestion

to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure. *In re Vaeck*, 1442 (Fed. Cir. 1991). Thus, "[m]easuring a claimed invention against the standard established by section 103 requires the oft-difficult but critical step of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See e.g., *W. L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 USPQ 303, 313 (Fed. Cir. 1983).

Applicant respectfully asserts that the Office Action fails to establish a *prima facie* case of obviousness because the prior art cited in the action does not teach or suggest all claim limitations. It is first noted that the process disclosed in Jensen is fundamentally different than the system disclosed in the present application. The process disclosed in Jensen, for example, is intended to standardize the reporting of workplace incidents by using various pre-determined lists of variables to assist users in creating and interpreting workplace reports. (Col. 1, lines 14–58; col. 4 lines 46–59.) The system disclosed in the present application, in contrast, advances the art by using special analysis techniques (discussed below in greater detail) to recognize trends and patterns in data collected over a period of time. Thus, while both inventions may be used in similar environments, the application invention focuses on new and improved data *analysis* and *presentation* techniques, while Jensen focuses on ensuring data *consistency* and *standardization*.

With regard to the elements of claim 1, applicant respectfully asserts that Jensen does not teach or suggest date gap or control chart analyses. Date gap analysis as described in the application specification eliminates "the dilution of data that arises with

quarterly or monthly data infusions.” (Page 10, lines 11–12.) Furthermore, “a typical date gap strategy looks at the days between incidents *rather than* the incident rate.” (*Id.* at lines 14–15 (emphasis added)). Finally, implementing date gap analysis involves averaging the number of days between events, which average “becomes the center line or standard against which trends and patterns may be identified.” (Page 7, lines 20-21.) It will be appreciated that date gap analysis presents several advantages over other forms of analysis. With date gap analysis, for example, the *timing* of data, including timing trends, is preserved. Furthermore, date gap analysis allows a user to obtain a meaningful report at any time, as opposed to waiting until the end of a month or quarter for a monthly or quarterly report.

While the process disclosed in Jensen allows a user to view details of events one event at a time, it does not allow the user to view trends undiluted by periodic data infusions or trends relating to the time between events. Furthermore, Jensen does not disclose a computer-implemented method of averaging a number of days between events and using the average as a center line or standard against which trends and patterns can be identified. FIG. 5 of Jensen, for example, presents an accident analysis by nature of injury, FIG. 6 by accident type, and FIG. 7 by day of the week. Each of these analyses is based on time periods at least one year in length and thus suffers from the dilution of data that date gap analysis seeks to avoid. While FIG. 6 further breaks the analysis down by months, it still focuses on the incident rate (per month) rather than on the time between incidents. Likewise, FIGs. 69 and 70 each disclose creating graphs that illustrate a frequency of accidents by day of the week and by time of the day, but, again, this merely illustrates accident *rate* as opposed to analyzing trends relating to *time between events*.

With regard to the control chart analysis limitation of claim 1, it should first be noted that a control chart is not merely any chart that presents data. Rather, a control chart specifically plots a statistic versus time, and is used to determine whether the distribution of data values generated by a process is stable over time. Control charts, for example, typically include upper and lower limits on which values of some statistical measure for a series of samples or subgroups are plotted; and frequently show a central line to help detect a trend of plotted values toward either control limit. Applicant respectfully asserts that Jensen does not teach or suggest such control chart analysis. For example, FIG. 5 presents an accident analysis by nature of injury, FIG. 6 by accident type, and FIG. 7 by day of the week, but none of these figures plots a statistic versus time. While FIG. 6 breaks accident rate down by month and therefore allows a user to generally compare accident rates of various months, it does not plot events versus time to allow the user to determine whether the distribution of the data values is stable over time.

With regard to the data workload adjustment limitation of claim 1, it is asserted in the Office Action that “it is old and well-known in the art of workplace management to adjust workloads accordingly in response to dangerous working conditions,” and that it would have been obvious to modify Jensen “to generate corrective actions involving workload adjustments . . .” Applicant respectfully asserts that the workload adjustment described in the Office Action is of an entirely different nature than the workload adjustment used in the application invention and therefore does not render obvious the workload adjustment of the application invention. Applicant’s invention, as claimed in claim 1 of the application, makes workload adjustments on *formatted data* in conjunction with date gap and control chart analyses to determine whether workload was a factor in causing

a particular signal. (Page 11.) That is, the application invention uses workload adjustments to more correctly *analyze* data relating to workplace trends of any type, not to merely *respond* to accident statistics or dangerous working conditions. It will be appreciated that integrating workload analysis into statistical algorithms to analyze data is substantially more involved and requires special expertise, education and/or experience.

Finally, with regard to the limitation in claim 1 of a second input device for allowing a user to request a more specific analysis of an event, it is asserted in the Office Action that Jensen discloses allowing a user to request a more specific analysis of at least one identified event. Applicant respectfully disagrees. The “more specific analysis,” as used in the present application, involves “the integration and cross-referencing of data sets, and for the display of multiple control charts, thereby allowing a user to place events of interest in context with other data sets.” (Page 12, lines 20–22.) That is, it allows a user to view component analyses of a statistical analysis of an event to better understand the analysis. Jensen, in contrast, does not teach such detailed specific analysis, but rather discloses allowing a user to perform an advanced investigation to “specify specific information for extraction” from selected records, and discloses providing a direct comparison of an incident to previously recorded incident records. (Col. 12, line 65 – col. 13, line 14; col. 5, lines 17–28.) Therefore, the more specific analysis of the application invention involves analyzing component analyses of a composite statistical analysis, while Jensen merely discloses allowing a user to view other data records relating to an event or a total number of previous events.

Figure 43, cited in the Office Action, does not disclose a “further analysis” as asserted in the Office Action. It should be noted first that there is no reference to FIG. 43

in the specification so the disclosure of FIG. 43 is utterly devoid of enabling detail and one is left guessing the details and utility of its disclosure. The “Performance Analysis” label of FIG. 43 is specifically cited in the Office Action, and the “Advanced Investigation” label is cited as implying a “further analysis.” The “Advanced Investigation” button illustrated in FIG. 43, however, is unrelated to the “Performance Analysis” section. It is clear from the illustration, for example, that the “Performance Analysis” section includes only three data fields, and that the “Report Overview” and the “Advanced Investigation” buttons—separated from the “Performance Analysis” section by a significant distance and contained within their own border—are not part of that section. Because “advanced investigation” per se is not defined in the specification of Jensen, one is left with only FIG. 41 (which includes a window entitled “Advanced Accident Investigation”) to ascertain the meaning of “advanced investigation.” FIG. 41 merely discloses a computer window that allows a user to look up a specific record and view specific pieces of information relating to an event and does not teach or suggest the complex advanced analysis of the present invention.

Jensen, therefore, does not teach or suggest various elements of claim 1 and a *prima facie* case of obviousness is not established in the Office Action. Claims 2–6 depend from claim 1. The Office Action cites rejections of claims 1–6 in rejecting claims 7–21 because of similar limitations, therefore the arguments set forth above in relation to the rejection of claim 1 also apply to the rejection of claims 7, 12 and 17 and respective dependent claims.

In view of the foregoing, a Notice of Allowance appears to be in order and such is courteously solicited.

Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 19-0522.

Respectfully Submitted,

By


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